

## **ABSTRACT**

The present invention provides a high voltage pulse generator used for deterring animals where the high voltage pulses are delivered to the animal through an electrical conductor that lays directly on the ground and is not insulated from the underlying ground system. The invention's high voltage pulse generator has a predetermined output impedance that is significantly lower than the impedance of an animal that may contact either the device's output or a conductor laying on the ground that is connected to the devices output. The invention's high voltage pulse generator also has a predetermined output impedance that is lower than the impedance of the conductor in contact with the underlying ground system. This significantly low output impedance allows the device to deliver maximum output energy to the conductor in contact with the underlying ground system while maintaining high voltage and adequate energy levels to deliver an effective shock for deterring animals. This significantly low output impedance also allows the device to limit the energy delivered to an animal to a small percentage of the devices maximum output such that the shock intensity felt by the animal is at a mild or annoying level for lengths of conductors in contact with the underlying ground system that vary from zero to hundreds or thousands of feet in length or more.